CLAIMS

1. A proximity switch having a coil former (3) which is fitted with one or more coils (4, 5, 6), has an associated board (8) and is held by a plastic housing (1), and having an electrically conductive shield (2) between the coil former (3) and the inner wall of the plastic housing (1), with the shield (2) making electrically conductive contact with a circuit (9) which is mounted on the board (8), characterized by the fact that the shield (2) is formed by an electrically conductive inner wall coating on the plastic housing (1).

2. The proximity switch as claimed in claim 1 or in particular as claimed in that claim, characterized by the fact that it is a copper nickel tin alloy.

3. The proximity switch as claimed in one or more of the preceding claims or in particular as claimed in one or more of the preceding claims, characterized by the fact that the coating has the following composition: 38% copper, 42% nickel and 20% tin.

4. The proximity switch as claimed in one or more of the preceding claims or in particular as claimed in one or more of the preceding claims, characterized by a metallic shielding ring (7), which surrounds the electrical circuit (9), as a contact means between the shield (2) and the electrical circuit (9).

5. The proximity switch as claimed in one or more of the preceding claims, or in particular as claimed in one or more

of the preceding claims, characterized by the fact that the coating (2) can be soldered.

6. The proximity switch as claimed in one or more of the preceding claims or in particular as claimed in one or more of the preceding claims, characterized by the fact that the coating (2) is thicker than 200 nm.

7. The proximity switch as claimed in one or more of the preceding claims or in particular as claimed in one or more of the preceding claims, characterized by the fact that the thickness of the coating (12) is between 0.5 µm and 20 µm.

8. The proximity switch as claimed in one or more of the preceding claims or in particular as claimed in one or more of the preceding claims, characterized by the fact that the resistance of the coating, measured at a distance of 5 mm with a measurement current of 1 mA is in the range between 10 Ω and 50 Ω, in particular between 20 Ω and 30 Ω.

9. The proximity switch as claimed in one or more of the preceding claims or in particular as claimed in one or more of the preceding claims, characterized by a contact lug (10) which is soldered to the coating.